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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,474	08/23/2001	Masanobu Iwasaki	50090-334	8431

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EXAMINER

SHAKERI, HADI

ART UNIT

PAPER NUMBER

3723

DATE MAILED: 12/04/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/934,474

Applicant(s)

IWASAKI ET AL.

Examiner

Hadi Shakeri

Art Unit

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/23/01 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 03.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the controller for each supply unit must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 1 recites the limitation "the major surface" in line 3. There is insufficient antecedent basis for this limitation in the claim. Same correction should be made regarding claim 2.

5. Claim 1 recites the limitation "the mist" in lines 8, 9 and 10. There is insufficient antecedent basis for this limitation in the claim. Same correction should be made regarding claim 2.

6. Claim 3 recites the limitation "each liquid" in lines 3 and 4. There is insufficient antecedent basis for this limitation in the claim. "the pressure", line 10 and "to a specific pressure" line 11, render the claim indefinite. Applicant may wish to amend the claim to

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read --...a pressure of... to said specific pressure--. Same correction should be made regarding claim 4.

7. Further regarding claim 3, the phrase "or a gas supply" in line 7, renders the claim indefinite for failing to particularly point out and distinctly claim the subject matter, for the use of alternate language and since the different embodiments of the system require different structures. It results in undue multiplicity. Same rejection applies to claims 4 and 5.

8. Claim 5 recites the limitation "said control unit" in line 2. There is insufficient antecedent basis for this limitation in the claim. "the flow rate of liquids", "said pip", and "the rotating speed" also lack sufficient antecedent bases.

9. Claim 8 is vague and indefinite because it is unclear whether the claim is a dependent claim or an independent claim. The language as written fails to establish the scope of the claim. If the claim is dependent, i.e., "a polishing solution supply system", it fails to further limit the parent claim. If the claim is independent, the language as written (limitations not actually disclosed, i.e., those encompassed by the "...system according to claim 1") renders the scope of the claim unascertainable.

Same rejection applies to claims to claims 9-20.

10. Claim 12 recites the limitation "the quantity" in line 3. There is insufficient antecedent basis for this limitation in the claim.

11. Claim 12 recites the limitation "the supply pressure" in line 5. There is insufficient antecedent basis for this limitation in the claim.

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12. Claim 12 recites the limitation "each liquid" in line 5. There is insufficient antecedent basis for this limitation in the claim.

13. Further regarding claims 14 and 15, "a polishing table" and "a carrier head" are already recited in claims 8 and 9.

### ***Claim Rejections - 35 USC § 102***

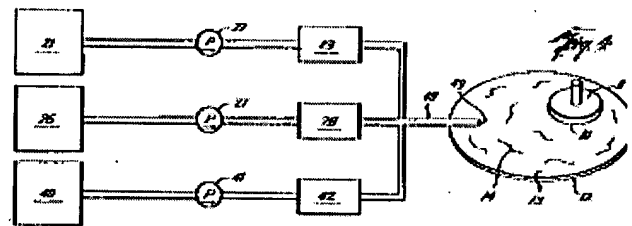
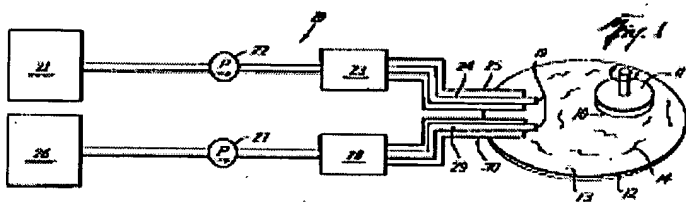
14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1-5, 8-12, 14-20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Murphy et al., US Patent No. 5,478,438.

Murphy et al. discloses all the limitations of the above claims, col. 4, lines 40-47.



### ***Claim Rejections - 35 USC § 103***

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 6, 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy et al.

Murphy et al. discloses all the limitations of the above claims, except for the use of aqueous solution of organic acid or hydrogen peroxide and the step of supplying water to the surface when slurry is not being supplied. Regarding claims 6 and 7, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use hydrogen peroxide, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Regarding claim 13, it would have been obvious to one having ordinary skill in the art at the time the invention was made to supply water when slurry is not being supplied, based on the desired parameter which would be within the general skill of a worker in the art.

### ***Conclusion***

18. Prior art made of record and not relied upon are considered pertinent to applicant's disclosure. Obeng et al., Rodriguez et al., Kawashima, Kimura et al., Nojo et al., Shibata et al., Shimomura et al., Olsen et al., Harada et al., Miyashita et al., and Walsh are cited to show related inventions.

19. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Hadi Shakeri at (703) 308-6279, FAX (703) 746-3279 for unofficial documents. The examiner can normally be reached on Monday-Thursday, 7:30 AM to 6:00 PM.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist at (703) 308-1148.

  
DERRIS H. BANKS  
PRIMARY EXAMINER

HS



November 21, 2001